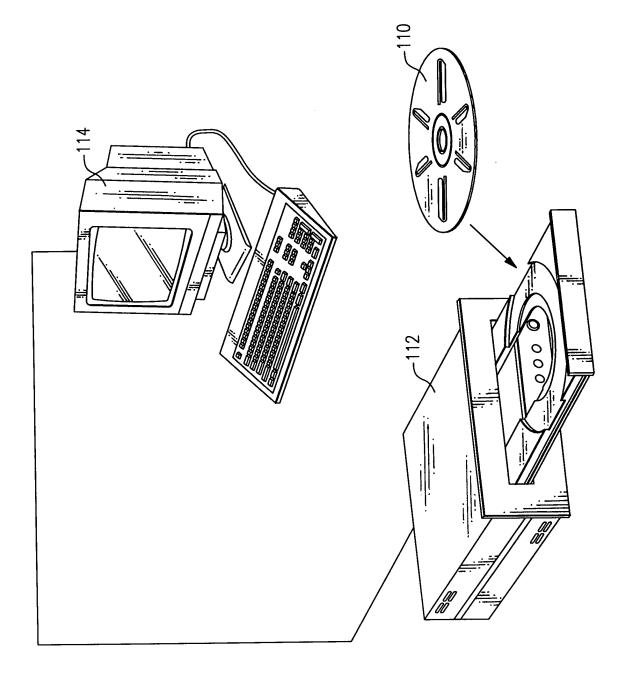
ITLE: METHODS FOR DECREASING NON-SPECIFIC MINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING HELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

1/45

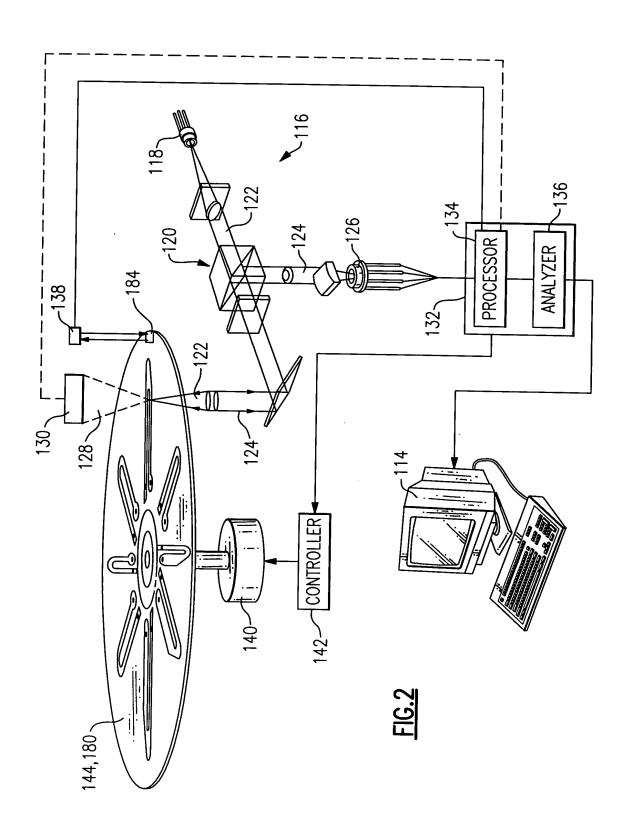




I certify that this document was submitted to the U.S. Patent and Trademark Office using U.S. Express Mail # <u>EL923484765US</u>
Jacquelyn Campbell

Print Name (February 28, 2002 Date

LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS RELATED OPTICAL BIODICE Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1
2/45



LE: METHODS FOR DECREASING NON-SPECIFIC MOING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 3/45 <u>144</u> -158 -164 FIG.3A 168⁻ 160-158 🛭 ر 170 0

LE: METHODS FOR DECREASING NON-SPECIFIC ANDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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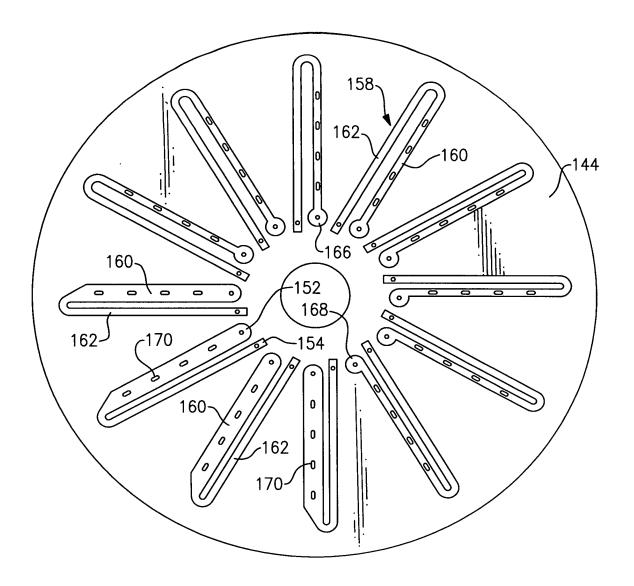


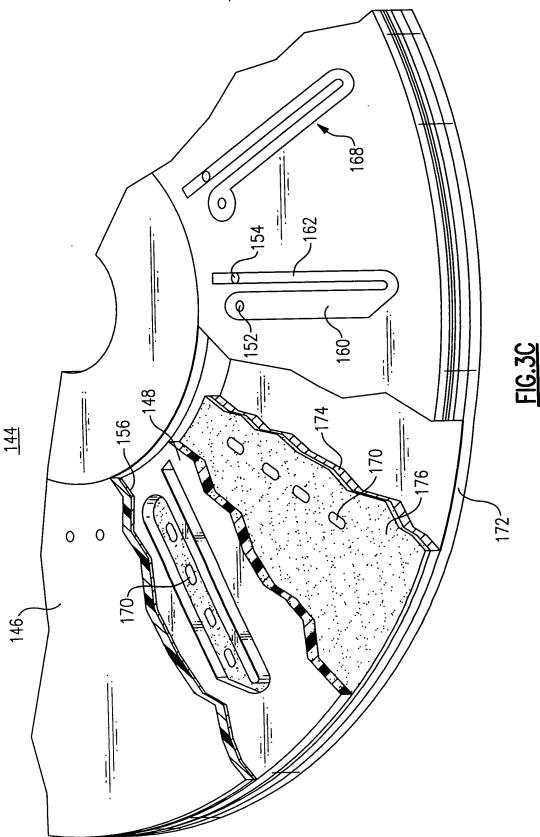
FIG.3B

E: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1
6/45 180--184 -182 154 152 184 148 158 FIG.4A 158⁻ 158 -158 \bigcirc 150 (3)~-170 $\cdot \bigcirc$ -170 \bigcirc \bigcirc \bigcirc \bigcirc

LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 7/45

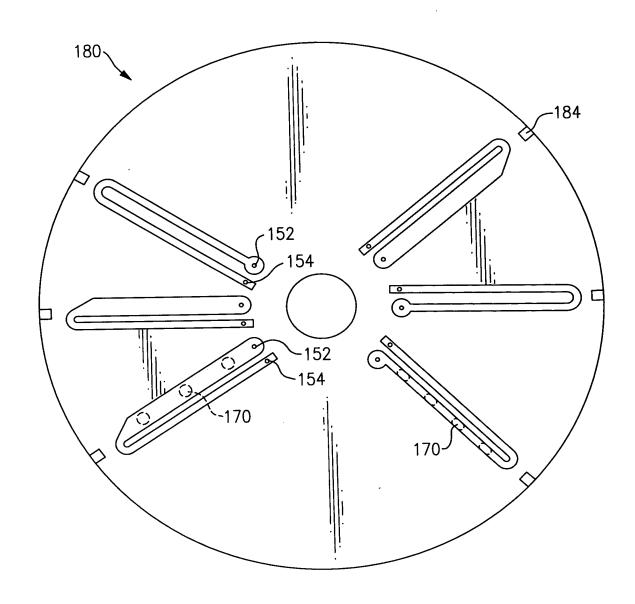
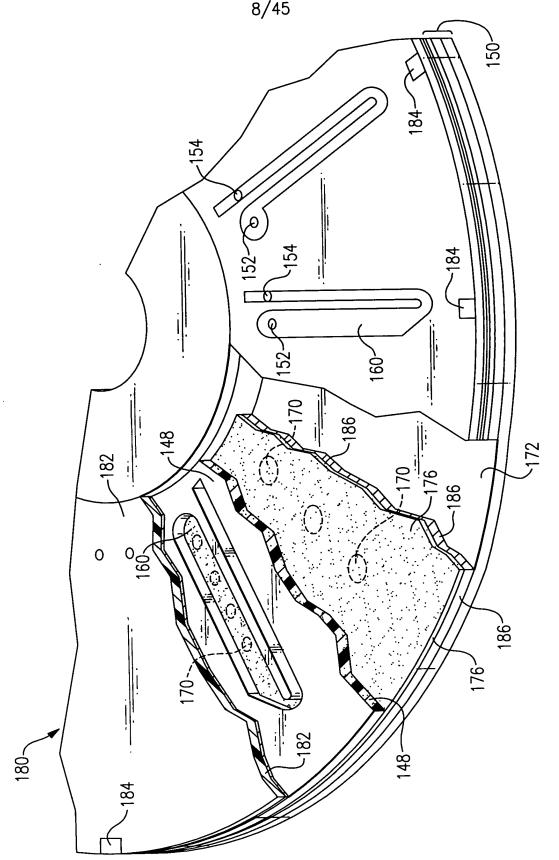


FIG.4B

LE: METHODS FOR DECREASING NON-SPECIFIC MINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

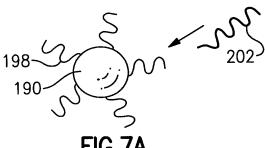
8/45



LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1 750 -176 186 148 186 182 -130 PHOT0 PHOT0 160 124. 160 88 750 7150 46 160 1887 FIG.6A

LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS RELATED OPTICAL BIOD.:
Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1
10/45



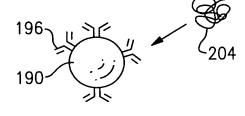


FIG.7B

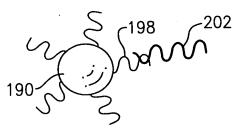


FIG.8A

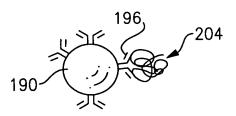


FIG.8B

FIG.9A

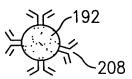
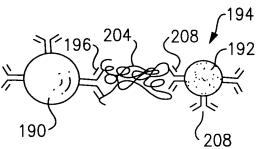
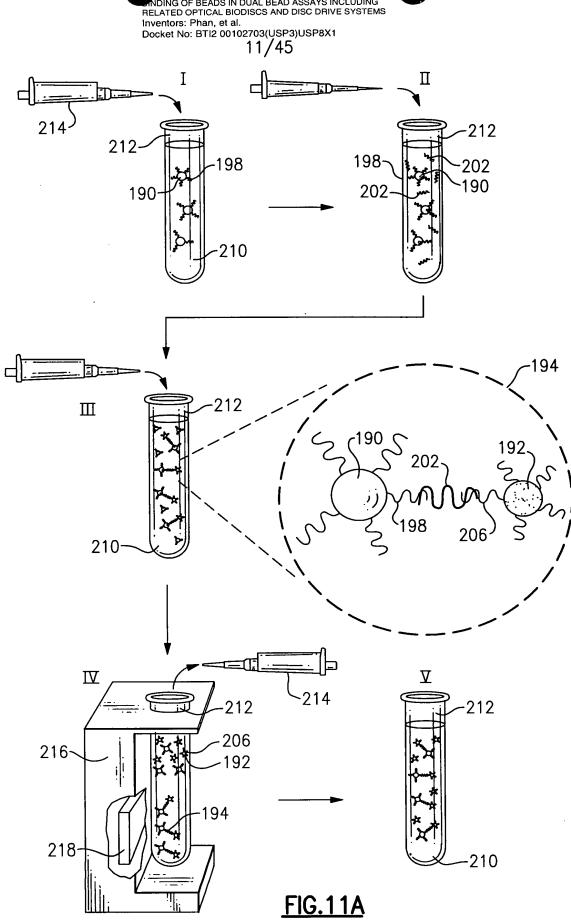
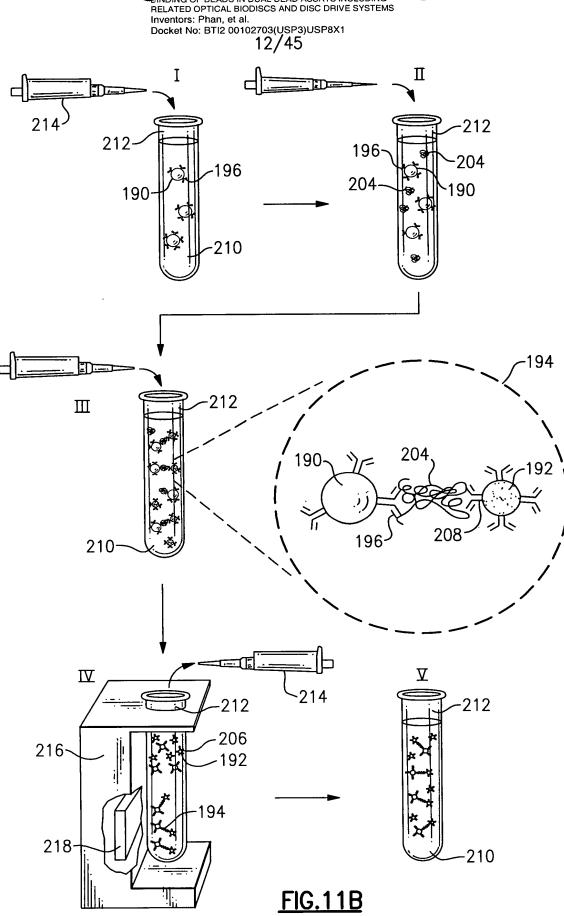


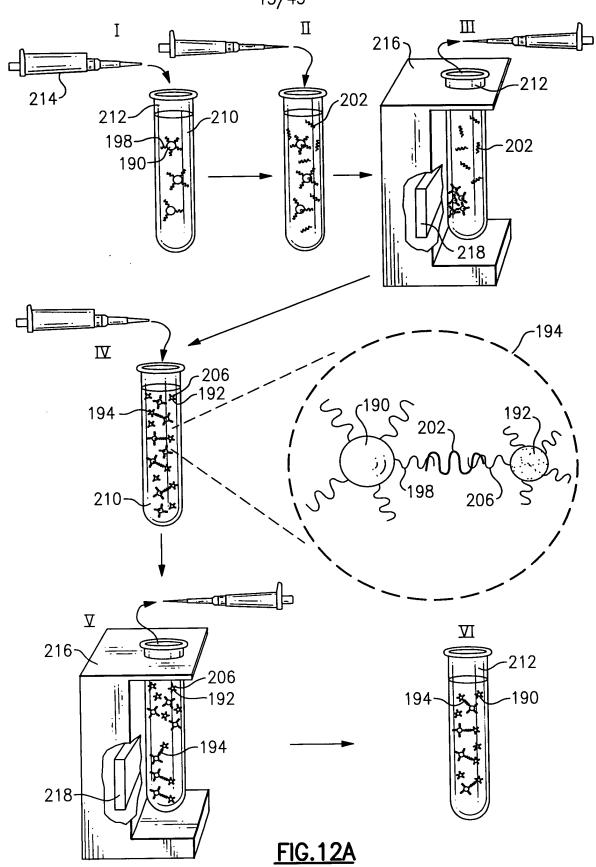
FIG.9B

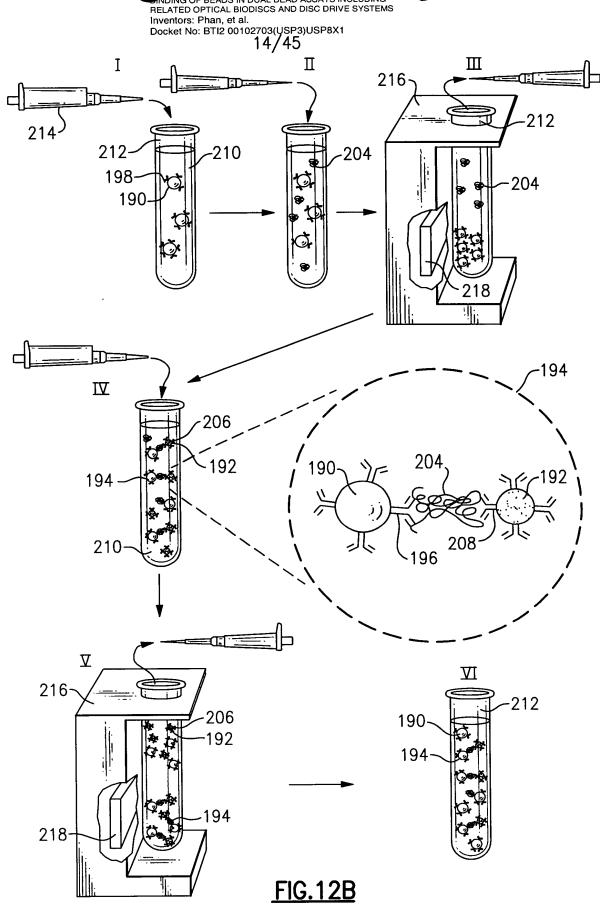






Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1

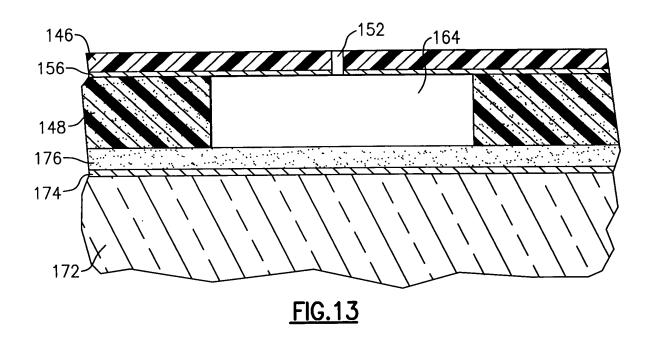


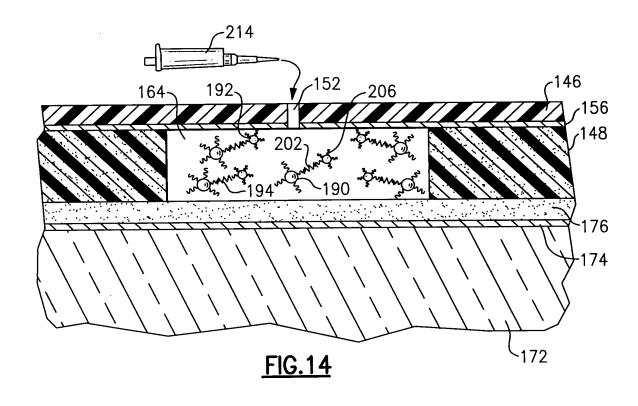


LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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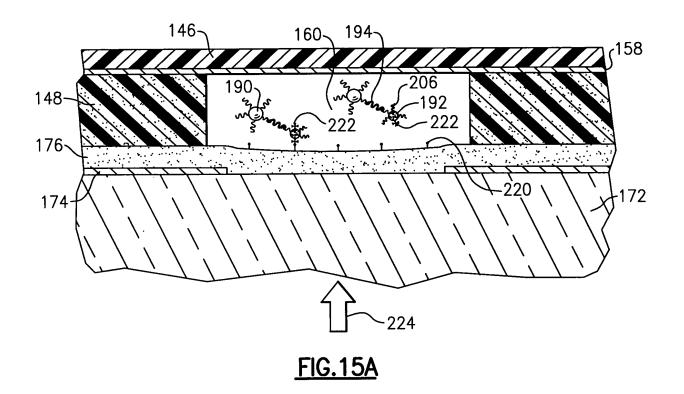


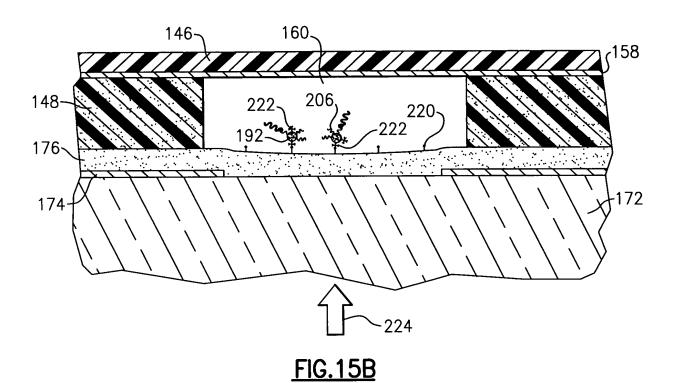


LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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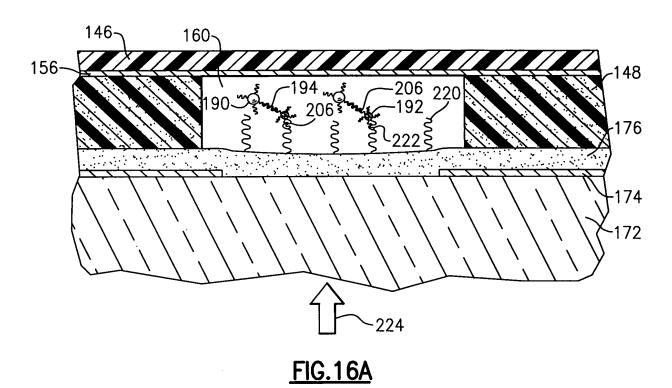


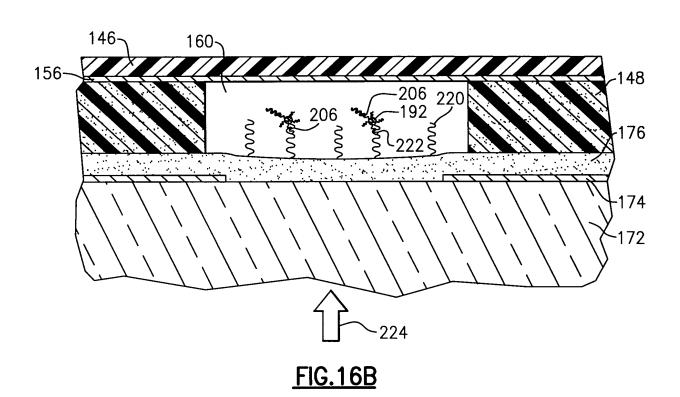


LE: METHODS FOR DECREASING NON-SPECIFIC NOING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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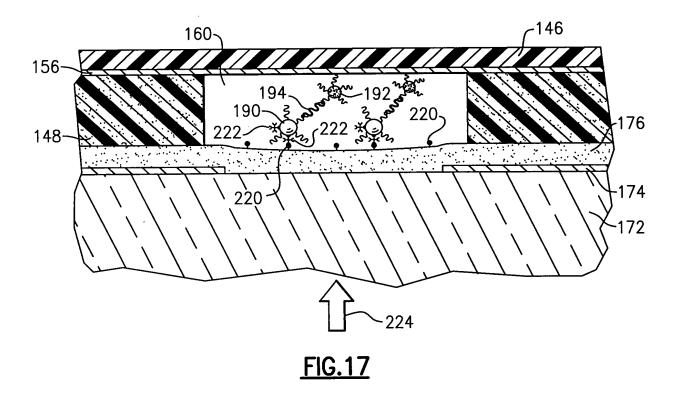




LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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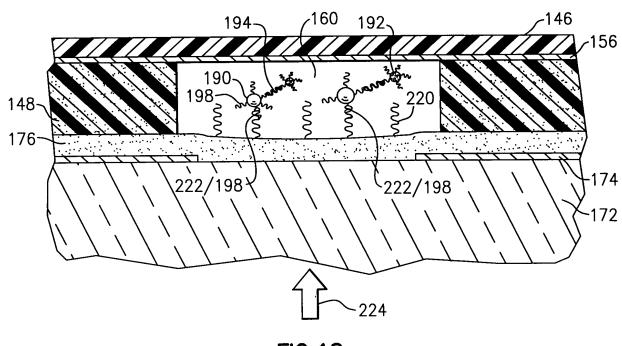


FIG.18

LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS RELATED OPTICAL BIOD.
Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1
19/45

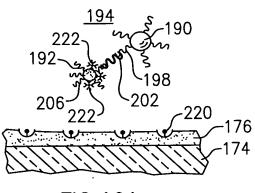


FIG.19A

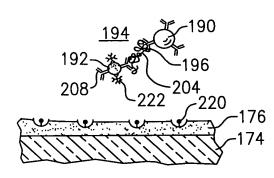


FIG.20A

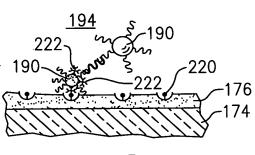


FIG.19B

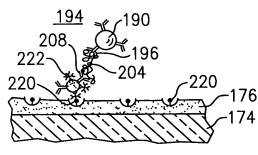


FIG.20B

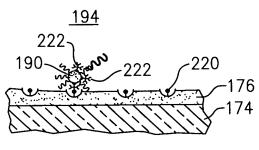


FIG.19C

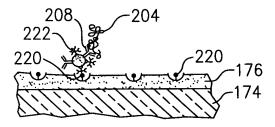
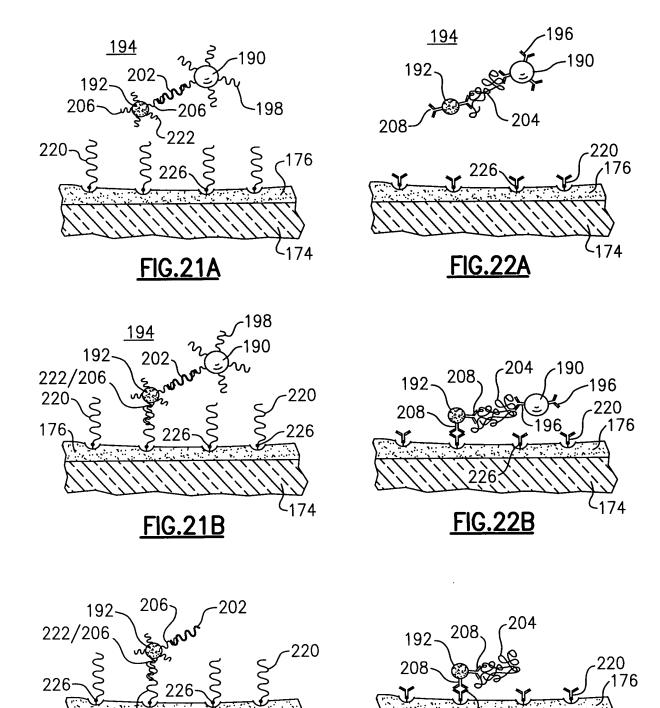


FIG.20C

LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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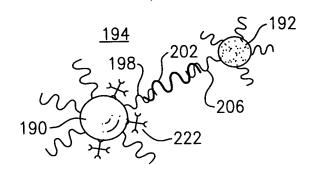
⁽174

FIG.21C

⁽174

FIG.22C

E: METHODS FOR DECREASING NON-SPECIFIC MIDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS RELATED OPTICAL BIOD.:
Inventors: Phan, et al.
Docket No: BTI2 00102703(USP3)USP8X1
21/45



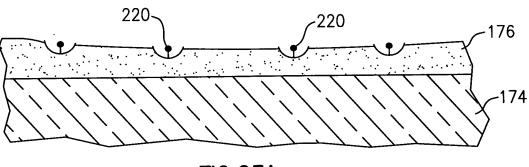


FIG.23A

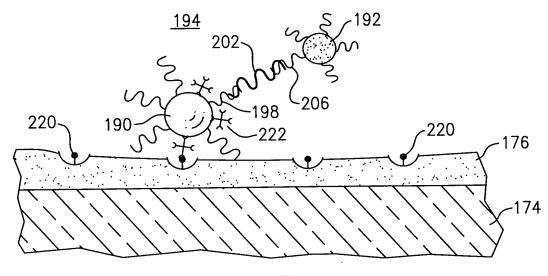


FIG.23B

LE: METHODS FOR DECREASING NON-SPECIFIC FINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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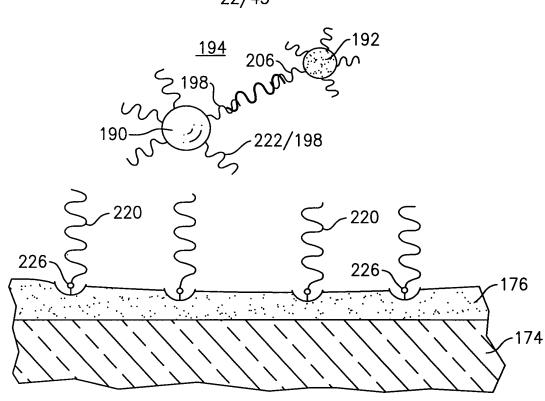


FIG.24A

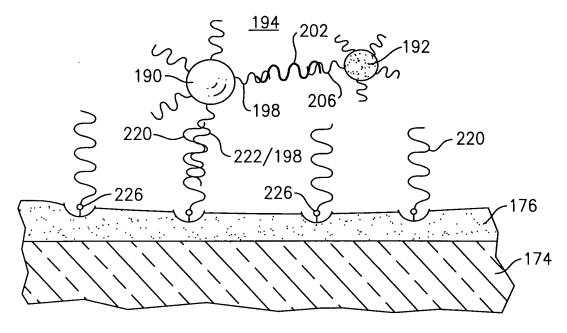
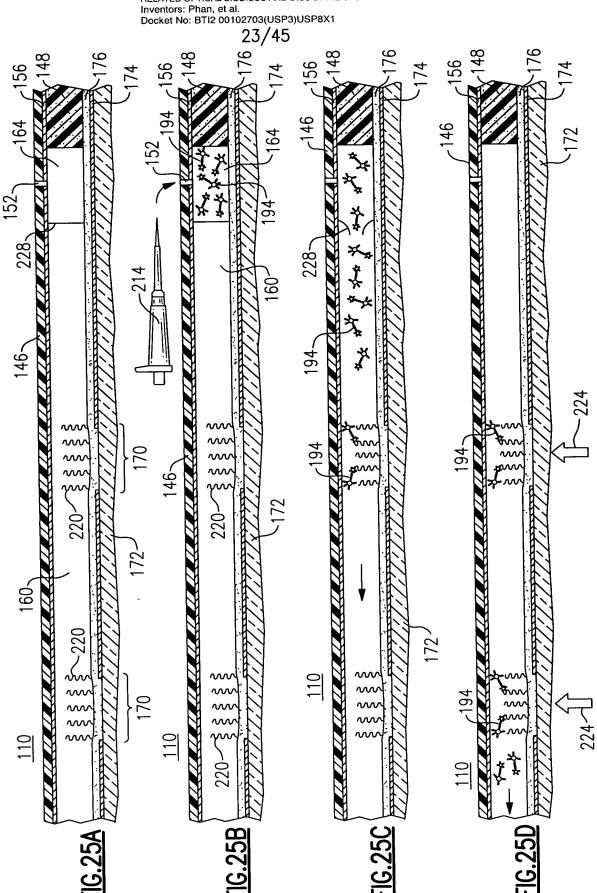
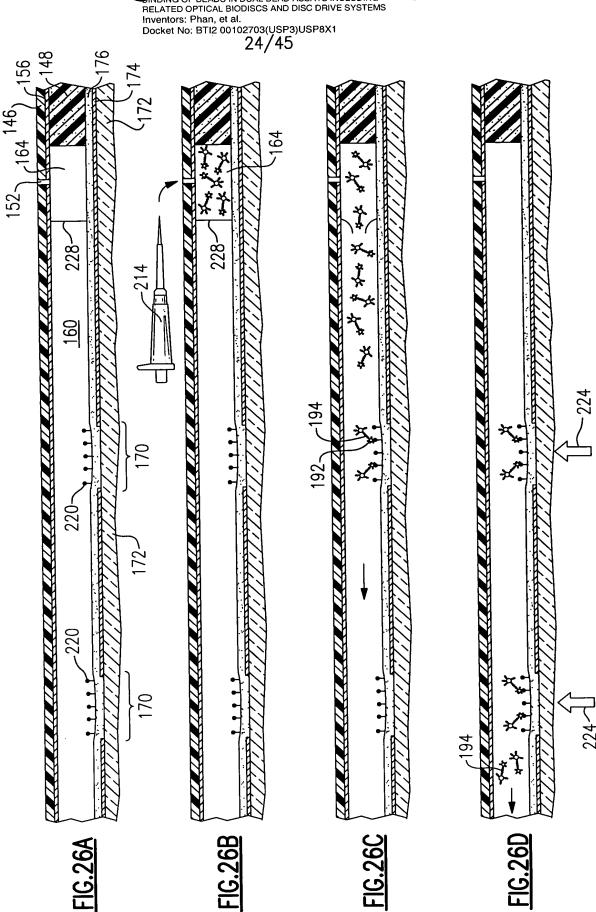


FIG.24B

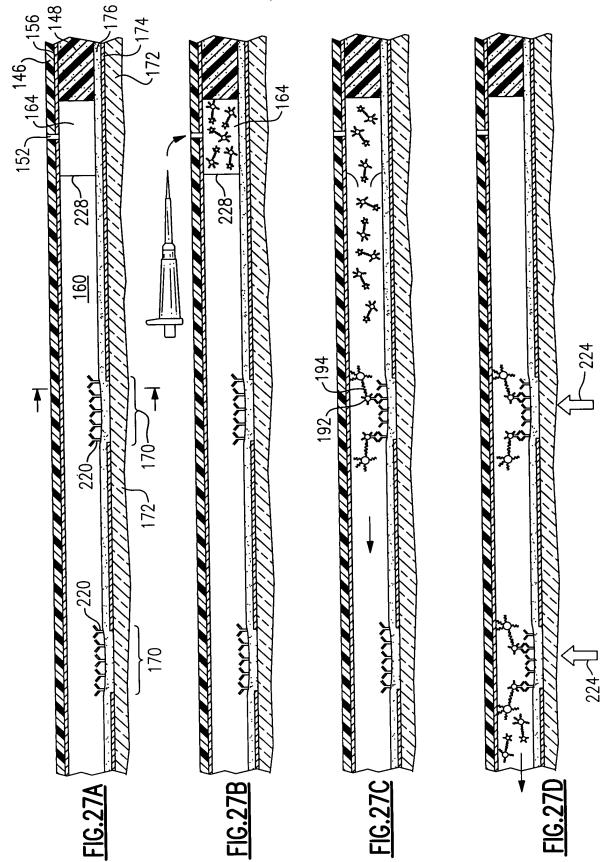




LE: METHODS FOR DECREASING NON-SPECIFIC MOING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

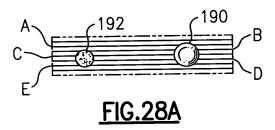
25/45



LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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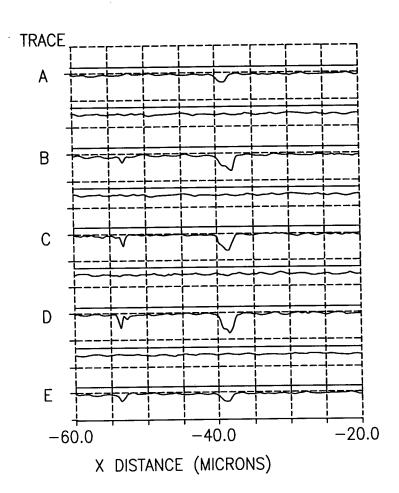
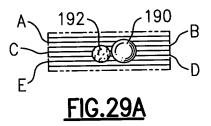


FIG.28B

LE: METHODS FOR DECREASING NON-SPECIFIC MOING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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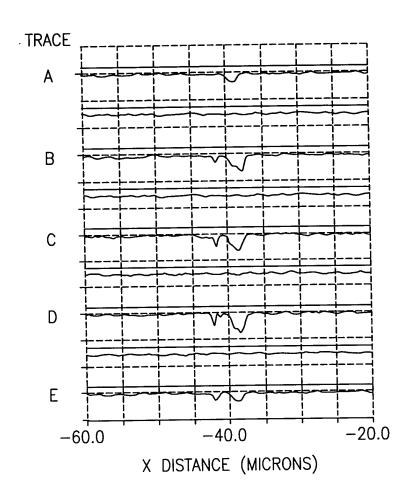
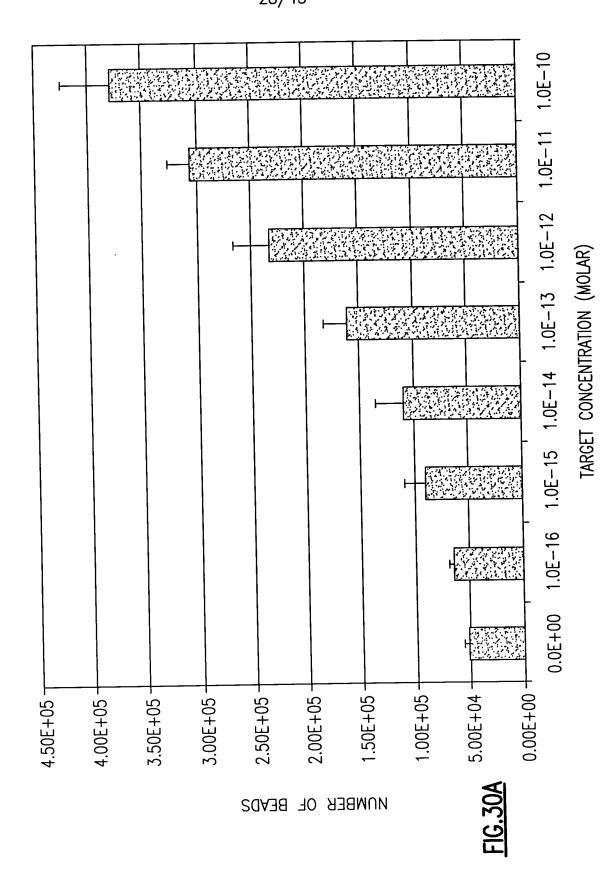


FIG.29B

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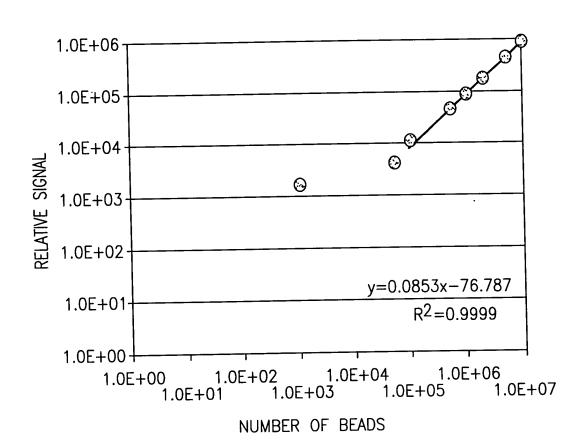


FIG.30B

LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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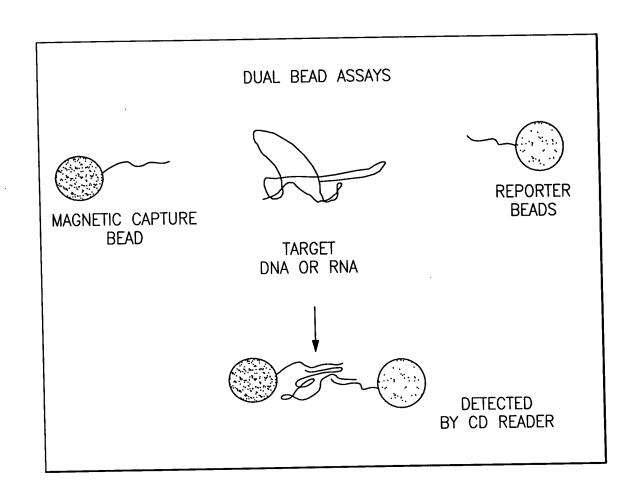


FIG.30C

Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1

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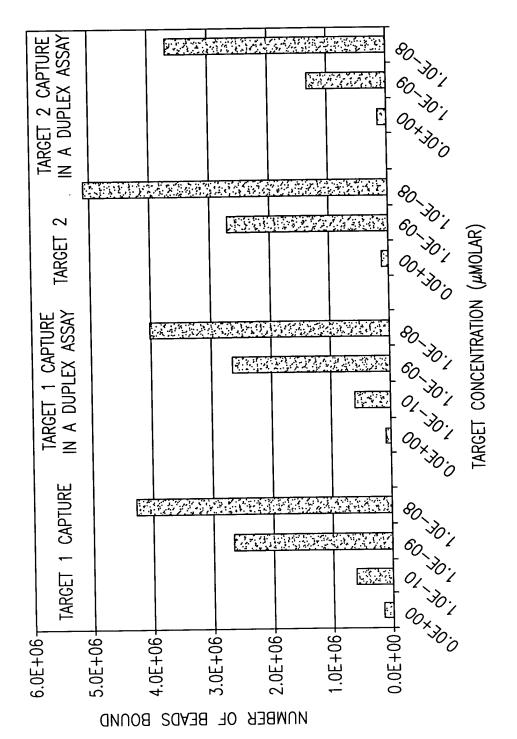


FIG.31

LE: METHODS FOR DECREASING NON-SPECIFIC MINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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DUAL BEAD ASSAY MULTIPLEXING

MAGNETIC BEAD\$	REPORTER BEADS	DUPLEX
(1)	O O O	® ⊙ ® ⊖ →
M	O O @	◎ ○ ◎ ◎ →
M		
M		M M

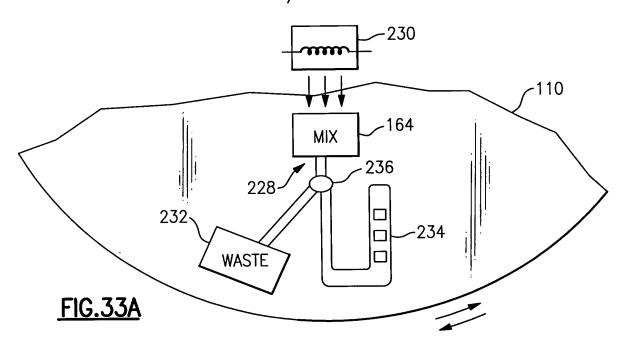
FIG.32

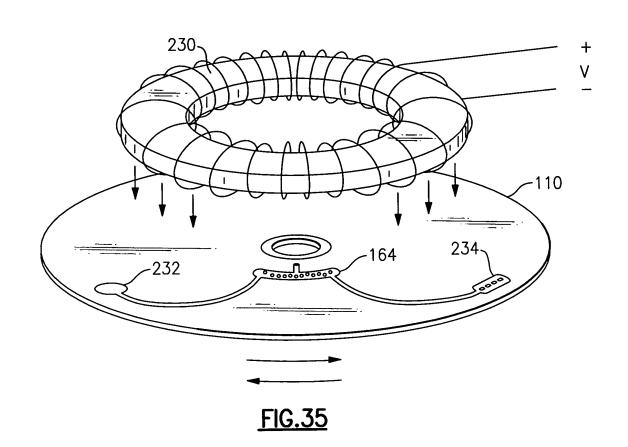
-

LE: METHODS FOR DECREASING NON-SPECIFIC NDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

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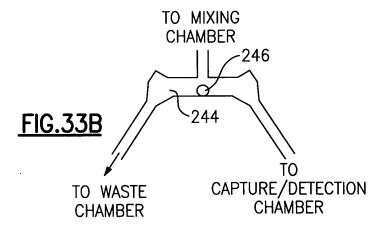


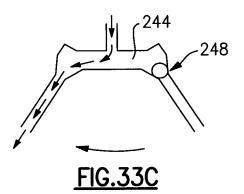


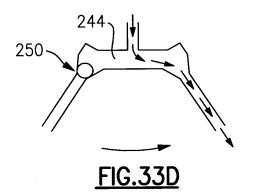
LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

Docket No: BTI2 00102703(USP3)USP8X1

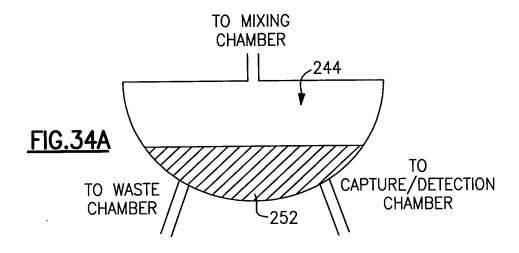
34/45

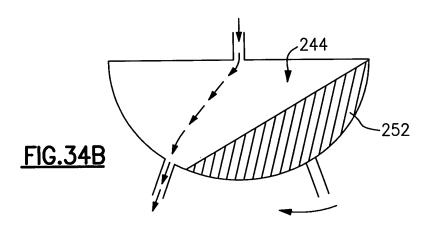


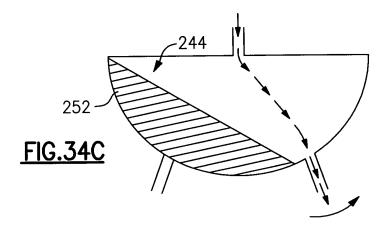




LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 35/45



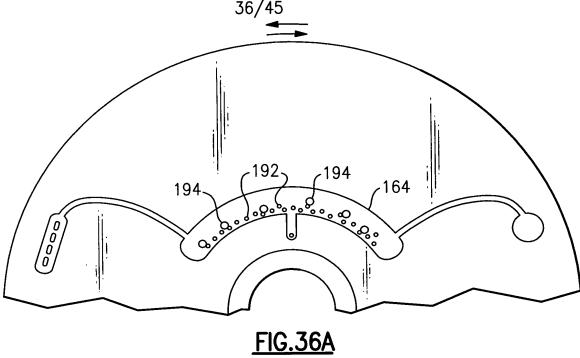


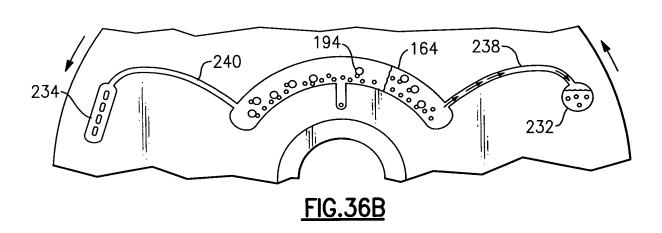


LE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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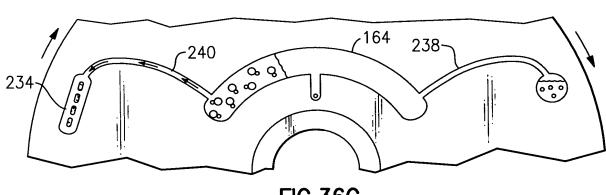


FIG.36C

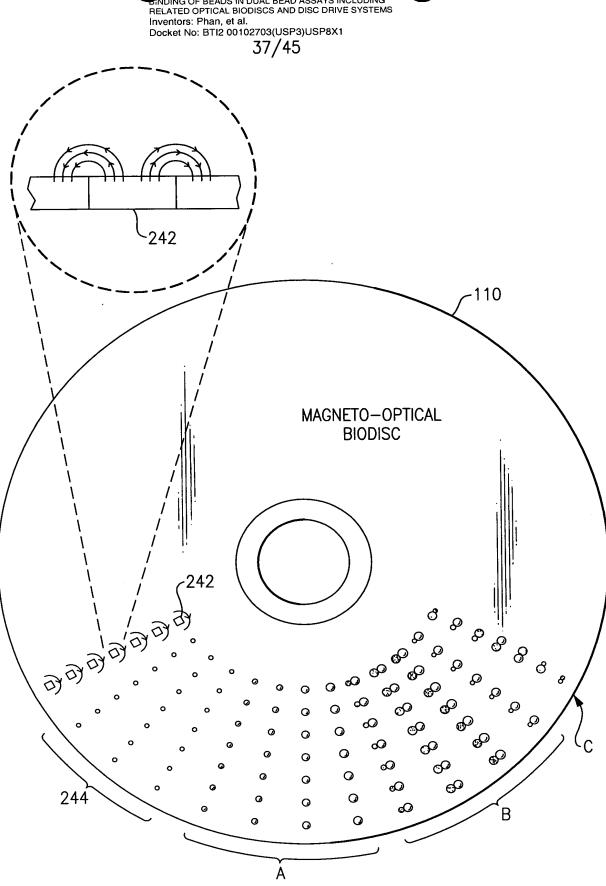
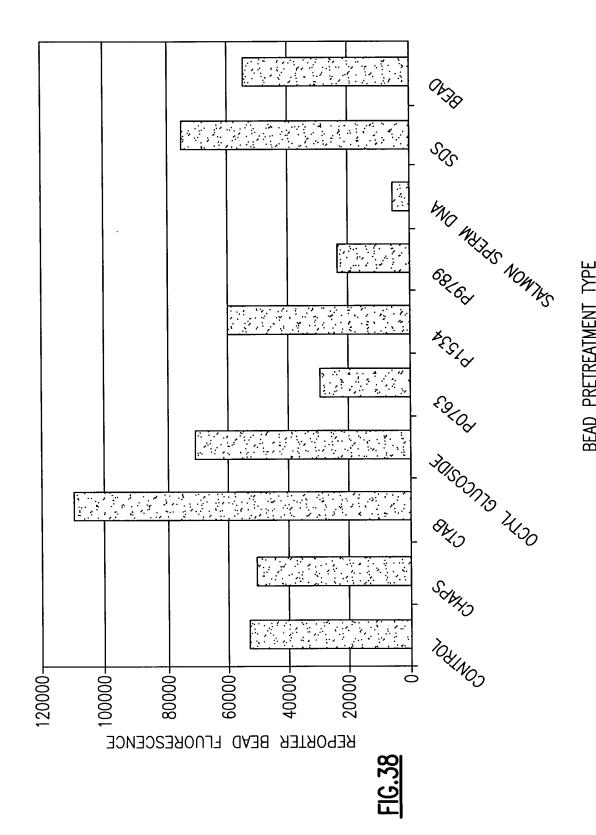


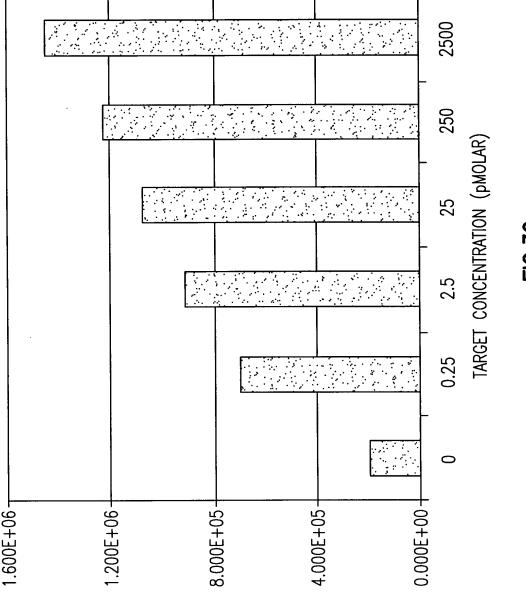
FIG.37

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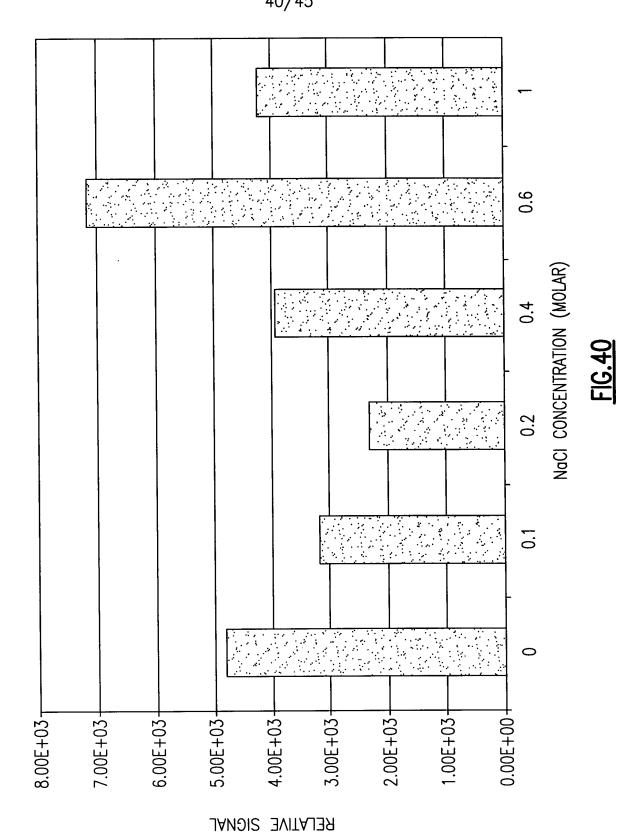


LE: METHODS FOR DECREASING NON-SPECIFIC SINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 39/45



NUMBER OF BEADS BOUND

FIG.39



LE: METHODS FOR DECREASING NON-SPECIFIC SMDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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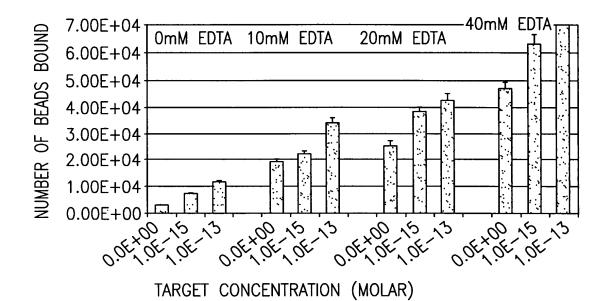
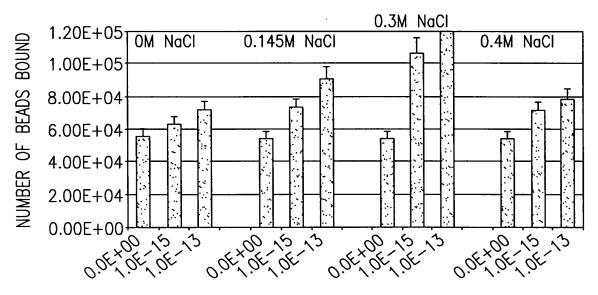


FIG.41



TARGET CONCENTRATION (MOLAR)

FIG.42

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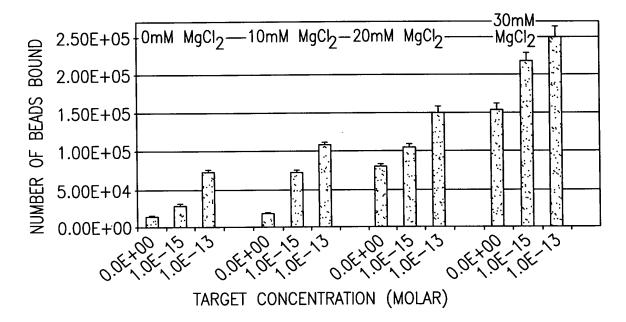


FIG.43A

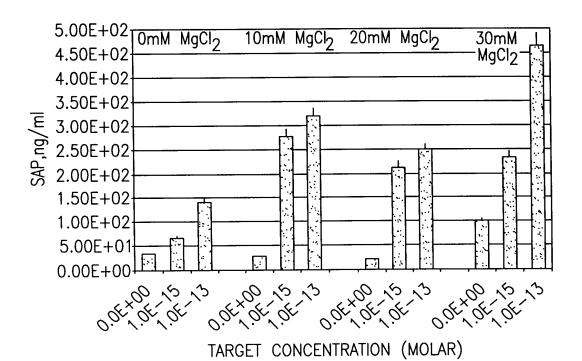


FIG.43B

E: METHODS FOR DECREASING NON-SPECIFIC ENDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al.

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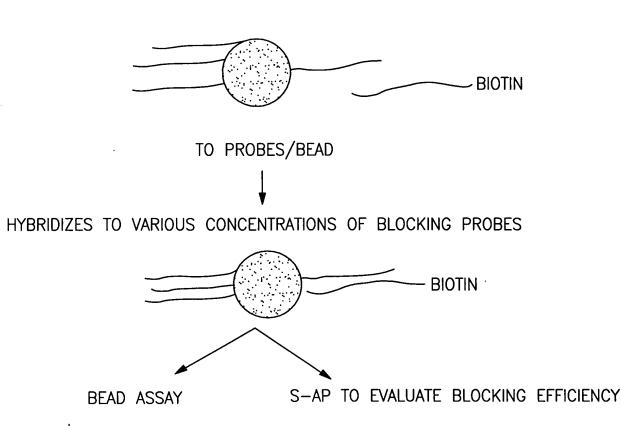
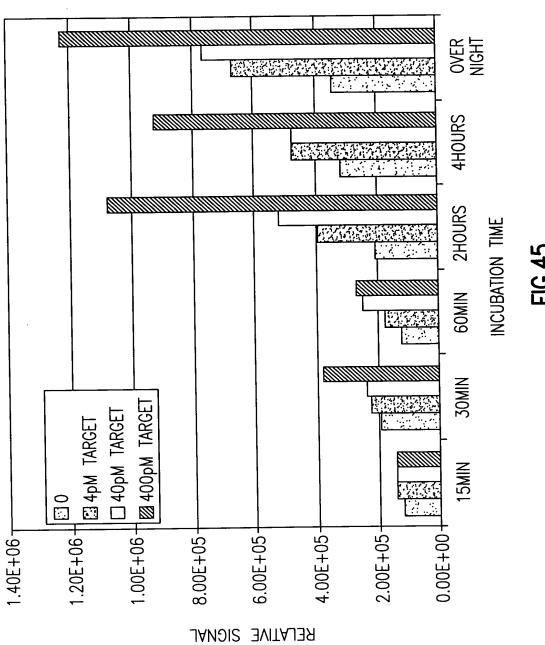


FIG.44

LE: METHODS FOR DECREASING NON-SPECIFIC BINDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1

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LE: METHODS FOR DECREASING NON-SPECIFIC ENDING OF BEADS IN DUAL BEAD ASSAYS INCLUDING RELATED OPTICAL BIODISCS AND DISC DRIVE SYSTEMS Inventors: Phan, et al. Docket No: BTI2 00102703(USP3)USP8X1 45/45

